

## CLAIMS

We claim:

1           1. An optoelectronic component with an epitaxial semiconductor layer sequence  
2   having an active zone that emits electromagnetic radiation, and at least one electrical  
3   contact region having at least one radiation-transmissive electrical contact layer, which  
4   contains ZnO and is electrically conductively connected to an outer semiconductor  
5   layer,  
6           wherein  
7           the contact layer is provided with watertight material in such a way that it is  
8   adequately protected against moisture.

1           2. The optoelectronic component according to claim 1,  
2           wherein  
3           watertight material is applied to free areas of the contact layer.

1           3.     The optoelectronic component according to claim 2,  
2           wherein  
3           watertight material is applied to all the free areas of the contact layer.

1           4. The optoelectronic component according to claim 1,  
2           wherein  
3   the watertight material is a dielectric that is transparent to an electromagnetic radiation  
4   emitted by the component.

1           5. The optoelectronic component according to claim 4,  
2           wherein  
3           the dielectric comprises one or more of the substances  $\text{Si}_x\text{N}_y$ ,  $\text{SiO}$ ,  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$   
4   and  $\text{SiO}_x\text{N}_y$ .

1           6. The optoelectronic component according to claim 1,  
2           wherein  
3           the refractive index of the watertight material is less than the refractive index of  
4   the contact layer and it is adapted to the greatest possible extent in particular for a  
5   minimization of reflections of the radiation emitted by the component at interfaces with  
6   respect to the watertight material.

1           7. The optoelectronic component according to claim 1,  
2           wherein  
3           the contact layer has a thickness corresponding to about an integer multiple of  
4   half the wavelength of a radiation emitted by the component, and the watertight material  
5   has a thickness corresponding to about a quarter of said wavelength.

- 1 8. The optoelectronic component according to claim 1,
- 2 wherein
- 3 the thickness of the watertight material is about 50 to 200 nm, including the limits.